the throat now appeared, which were rapidly succeeded by stiffness of the trunk, increasing into tetanic spasms. Death two minutes after removal.

Strychnia and Alcohol.—Foot immersed in a solution of alcohol and strychnia for upwards of thirty-five minutes; no symptoms of strychnine poisoning. Removed from solution and washed. Twelve hours later, no dilatation nor contraction of pupils.

The above observations evidently show that medicinal substances may be very rapidly absorbed into the circulation under certain circumstances, among which, the most important is the choice of the menstruum in which they are dissolved.

It remains for us to examine into the effect of temperature, inflammation, neuro-vascular paralysis, &c., on absorption. But, what is of still more importance, we have to see how far these facts are applicable to man in health and disease.

Meanwhile, I take this opportunity to state that a remarkable uniformity exists between cutaneous absorption in man and in the lower animals, and I believe that the application of these facts to practical medicine promises to be very important and extensive.—*Journal of the Royal Society.*

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2. *Subarachnoidean Fluid.*—M. JOBERT DE LAMBALLE publishes the following singular case, to prove that Magendie erroneously considered the loss of the subarachnoidean fluid a cause of functional disturbance to the cerebro-spinal system.

A person of strong constitution, who was admitted into the Hôtel Dieu on the 11th of December, 1858, and died eleven days later, on the 22d, had been stabbed with a dagger by a man who was in the habit of paying her frequent visits. The blow was struck with great violence, and the blade had broken off, close to the handle of the poniard, the base corresponding to the skin, while its point penetrated into the vertebral cavity. The large bloodvessels had escaped injury, and the hemorrhage was therefore unimportant; but a continuous discharge of a serous fluid, analogous to the serum of blood, was observed oozing from the oblique wound of the integument. The sheets and bedding were wet through, so great was the amount which exuded daily, and the fluid, on examination, was found to consist of serum containing a few blood-corpuscles. It was impossible to remove the foreign body before the third day of the patient's sojourn in the hospital, and when it was withdrawn, a considerable rush of the same liquid took place. No muscular collapse, or diminution of muscular contractility was observed at any time, notwithstanding the escape of the cerebro-spinal fluid, nor any change in the mental powers. The patient having died from spinal meningitis, a post-mortem examination showed that the body of the sixth and seventh cervical vertebræ had been grazed by the instrument, the inter-vertebral substance injured, and the parietal dura mater and arachnoid perforated by the point of the blade.

The case is favourable to M. Longet's view, who, repeating Magendie's experiments, demonstrated that the withdrawal of the cerebro-spinal fluid does not materially affect the gait of animals.—*Journal of Pract. Med. and Surg.*

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3. *Presence of Urea in Chyle and Lymph.*—Two years ago, M. AD. WURTZ finding at Alfort a carnivorous bull in which a fistula of the thoracic duct had been established, it occurred to him to search for urea in the chyle of this animal. To this inquiry he was induced by the consideration, that urea ought to originate, not in the capillary bloodvessels, as has been sometimes pretended, but in the intimate structure of all the tissues, at every part where materials which have become unfit for life require to be removed by the respiratory combustion. If this be the case, we ought to detect urea not only in the blood, where its presence has been ascertained for a long time past, but also in lymph, and, consequently, in the chyle of the thoracic duct. It appears, indeed, natural, that the lymphatics should contribute their share towards the absorption of the materials proceeding from the metamorphoses of the tissues, in which the radicles of these vessels are distributed. The chyle of the bull referred to was accordingly found very rich in urea. M. Wurtz coagulated, at a warm temperature, about 600 grammes of the chyle, evaporated the filtered liquid, treated it with absolute

alcohol, evaporated and then exhausted the alcoholic extract by means of ether; the latter deposited perfectly colourless crystals of urea, which was partially converted into nitrate. This result induced M. Wurtz to extend his researches to lymph. Having procured, through the kindness of M. Colin, the lymph of the dog, the cow, the bull, and the horse, he ascertained in them the presence of urea. It further appeared of interest to compare the quantities of urea contained in the blood, chyle, and lymph of the same animal. For this purpose it was necessary to undertake certain quantitative researches, which were accomplished by means of a process which it would be too long to explain, but which is essentially founded on a combination of the methods which MM. Liebig and Bunsen have proposed for the determination of urea. The following table presents the numerical results obtained in these researches:—

NAME OF ANIMAL.	DIET.	QUANTITY OF UREA CONTAINED IN 1000 GRAMMES OF		
		Blood.	Chyle.	Lymph.
Doe	Flesh	0.089	...	0.158
"	"	...	0.183	...
Cow	Dried lucern	0.192	0.192	0.193
Bull	Lucern and rape-cake	...	0.189	0.213
"	Oil-cake before rumination	...	...	0.215
Ram	Ordinary diet—rumination suspended	(arterial) 0.248	0.280	...
Sheep	" " "	...	0.071	...
Horse	" " "	...	...	0.126 0.112

M. Wurtz adds, that having had occasion to analyze a certain quantity of chyle properly so called, collected along the course of the mesenteric chyliferous vessels, after the ganglions, he ascertained there also the presence of a small quantity of urea. This is no doubt derived from the changes of tissue which are effected in the walls of the intestine itself.—*Edin. Med. Journ.*, Dec., 1859, from *Comptes Rendus de l'Acad. des Sciences*, July, 1859.

MATERIA MEDICA AND PHARMACY.

4. *Saccharated Lime.*—Lime dissolves in water in much larger proportion in presence of sugar, and this solution is strongly recommended as a tonic and antacid by Dr. JOHN CLELAND (*Edinburgh Med. Journ.*, August, 1859).

Dr. C. gives the following formula for its preparation:—

"Slake 8 ounces of quicklime; rub up with it 5 ounces of white sugar; add 1 pint of water; stir for some time, till the hard stiff masses which the sugar and lime are liable to run into are as much as possible dissolved; then filter. The product should be perfectly clear, and of only a slightly yellowish tint. A solution made in this way will contain 18 grains of lime in every ounce by weight, and altogether about 106 grains of solid matter to the ounce. Taken undiluted, a few drops are sufficient to roughen the tongue. When diluted, the taste is at first an acrid one of lime; but this is immediately replaced by a sweet taste in the back of the mouth, admitted to be pleasant. Made as just recommended, the solution is not liable to decomposition unless it is exposed to the air. By employing a smaller proportion of water to lime, a still stronger solution may be obtained, but not with any practical advantage, as there is increased difficulty of filtration and greater tendency to decomposition."

This preparation, Dr. C. states, "is, of course, a powerful antacid, and probably the best we have, since it is stronger and pleasanter than magnesia, and does